



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,078	04/03/2001	Roberto DeLima	RSW92000141US1	9743

7590 06/03/2005
Jeanine S. Ray-Yarletts
IBM Corporation T81/503
PO Box 12195
Research Triangle Park, NC 27709

EXAMINER

BRUCKART, BENJAMIN R

ART UNIT	PAPER NUMBER
----------	--------------

2155

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/825,078

Applicant(s)

DELIMA ET AL.

Examiner

Benjamin R. Bruckart

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Detailed Action

Status of Claims:

Claims 1-57 are pending in this Office Action.

The objection to the specification is withdrawn in light of applicant's amendment.

Response to Arguments

Applicant's arguments filed in the amendment filed 4/6/2005, have been considered but are moot in view of the new ground(s) of rejection.

Applicant's invention as claimed:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-35, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al.

Regarding claim 1, a method of providing improved quality of service over a series of related messages exchanged between computers in a networking environment (Hill: col. 3, lines 7-21), comprising:

determining one or more transactional quality of service ("TQoS") values to be applied to the related messages (Hill: col. 3, lines 15-21);

using the determined TQoS values when transmitting at least one of the related messages for delivery to a particular one of the computers (Hill: col. 8, lines 35-50);

annotating selected ones of the related messages with information reflecting the determined TQoS values (Hill: col. 8, lines 38-50); and

transmitting the annotated ones of the related messages with the information reflecting the determined TQoS values (Hill: col. 8, lines 35-50)

Art Unit: 2155

The Hill reference does not explicitly state sending to a computer but teaches routing over a LAN to a destination as addressed.

The Ben-Shaul reference teaches sending messages to a particular computer (Ben-Shaul: page 1, para 7-8; page 12, para 171).

The Ben-Shaul reference further teaches the invention improves end-to-end delivery of content over the internet (Ben-Shaul: page 1, para 5).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of improved quality of service over a series of related messages exchanged between computers as taught by Hill while employing responses as taught by Ben-Shaul in order to improve end-to-end delivery of content over the internet (Ben-Shaul: page 1, para 5).

Claims 2-4, 7-18, 35, 52, 53 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Hill et al and Ben-Shaul et al.

Regarding claim 2, the method according to claim 1, wherein one of the TQoS values is a transmission priority value to be used when transmitting the annotated messages (Hill: col. 3, lines 29-40).

Regarding claim 14, the method according to claim 2, further comprising using the transmission priority value to prioritize the transmission of the at least one transmitted message through the networking environment (Hill: col. 4, lines 33-54).

Regarding claim 16, the method according to claim 2, wherein annotating selected ones of the related messages with information reflecting the determined TQoS values further comprises storing the information reflecting the determined TQoS values as part of a routing token in the annotated messages (Hill: col. 8, lines 35-50).

Regarding claim 17, the method according to claim 16, wherein the routing token is used to modify a Uniform Resource Locator from a header of selected ones of the related messages (Hill: col. 4, lines 44-46; col. 5, lines 36-62).

Regarding claim 18, the method according to claim 17, wherein the routing token further comprises information enabling identification of the particular computer and another computer which performs the transmitting step (Hill: col. 5, lines 33-39; col. 7, lines 56-60), as well as identification of a storage area used to store the determined TQoS values for the related messages (Hill: col. 2, lines 54-57).

Regarding claim 3, the method according to claim 1, wherein one of the TQoS values is available bandwidth information pertaining to a network connection to the particular computer (Hill: col. 5, lines 57-63).

Regarding claim 13, the method according to claim 3, further comprising enforcing bandwidth allocation using the available bandwidth information as the at least one transmitted message is transmitted through the networking environment (Hill: col. 5, lines 57-63; col. 4, lines 46-54).

Regarding claim 4, the method according to claim 1, further comprising storing the determined TQoS values for use when transmitting subsequent ones of the related messages to the particular computer (Hill: col. 5, lines 12-32).

Regarding claim 15, the method according to claim 4, wherein storing the determined TQoS values for use when transmitting subsequent ones of the related messages to the particular computer comprises storing the determined TQoS values in a server computer (Hill: col. 5, lines 6-31; 40-62).

Regarding claim 12, the method according to claim 1, wherein using the determined TQoS values when transmitting at least one of the related messages for delivery to a particular one of the computers further comprises using the determined TQoS values to set markings in a network layer header of the transmitted annotated messages (Hill: col. 8, lines 35-50).

Art Unit: 2155

Regarding claim 10, the method according to claim 5, wherein at least one of the annotated messages is a response that serves a Web page to the particular computer and wherein at least one of the subsequent ones of the related messages is a request for information referenced by the Web page (Ben-Shaul: page 1, para 8).

Regarding claim 11, the method according to claim 5, wherein at least one of the annotated messages is a response that serves a Web page to the particular computer and wherein at least one of the subsequent ones of the related messages is a request for information selected from the Web page by a user of the particular computer (Ben-Shaul: page 1, para 8).

Regarding claim 7, the method according to claim 1, wherein at least one of the annotated messages is a response that serves a web page to the particular computer (Ben-Shaul: page 1, para 7 and 8).

Regarding claim 8, the method according to claim 1, wherein at least one of the annotated messages is a request from the particular computer for a Web page (Hill: col. 3, lines 7-21; Ben-Shaul: page 1, para 8).

Regarding claim 9, the method according to claim 1, wherein at least one of the annotated messages is a request from the particular computer for a Web object (Ben-Shaul: page 1, para 8).

Regarding claim 34, the system according to claim 22, wherein:

the TQoS values comprise at least (1) a transmission priority value to be used when transmitting the annotated messages (Hill: col. 3, lines 29-40) and (2) available bandwidth information pertaining to a network connection to the particular computer (Hill: col. 4, lines 33-54); and

at least one of the annotated messages is a response that serves a Web object to the particular computer from a network cache (Ben-Shaul: page 1, para 7-8); and

wherein the means for using the determined TQoS values further comprises using the determined TQoS values, to prioritize transmission of the packet to enforce bandwidth allocation using the available bandwidth information as the packet is transmitted (Hill: col. 5, lines 57-63; col. 4, lines 46-54).

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al in further view of U.S. Patent No. 6,574,218 by Cooklev.

Regarding claim 5,

The Hill and Ben-Shaul references teach the method according to claim 1, wherein the particular computer is a client computer (Ben-Shaul: Fig 1, tag 14), and transmitting the annotated ones of the related messages with the information reflecting the determined TQoS values (Hill: col. 8, lines 35-50) to the particular computer comprises transmitting the related messages from a server computer to the client computer (Ben-Shaul: page 1, para 7-8),

receiving the transmitted annotated messages at the client computer (Ben-Shaul: page 1, para 7-8).

The Hill and Ben-Shaul references do not explicitly state sending the TQoS values to the server.

The Cooklev reference teaches:

transmitting the TQoS values from the client computer to the server computer with subsequent ones of the related messages (Cooklev: col. 7, lines 46-52).

The Cooklev reference further teaches the invention provides an efficient approach to ensure streaming data from a server to a client (Cooklev: col. 4, lines 45-54).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of improved quality of service over a series of related messages exchanged between computers as taught by Hill and Ben-Shaul while transmitting data back to the server as taught by Cooklev in order to efficiently ensure streaming data from a server to a client (Cooklev: col. 4, lines 45-54).

Claim 6 is rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Hill et al, Ben-Shaul et al, and Cooklev.

Art Unit: 2155

Regarding claim 6, the method according to claim 5, wherein:

the annotated messages transmitted from the server computer to the client computer comprise an object reference that is annotated to carry the TQoS values (Hill: col. 2, lines 54-57; header); and

transmitting the TQoS values from the client computer to the server computer with subsequent ones of the related messages comprises automatically returning the TQoS values to the server computer with subsequent ones of the related messages based on the annotation of the object reference in a related message that is received from the server computer (Hill: col. 8, lines 35-50; Cooklev: col. 7, lines 44-52; col. 10, lines 41-52).

Claims 36, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al in further view of U.S. Patent No 5,907,547 by Foladare et al.

Regarding claim 36,

The Hill and Ben-Shaul reference teaches the system according to claim 35 where QoS values are stored in the headers of packets.

The Hill and Ben-Shaul reference does not explicitly state cookies.

The Foladare reference teaches values are stored as cookies in the headers (Foladare: col. 7, lines 45-65).

The Foladare reference further teaches the cookie downloaded in the packet creates a connection (Foladare: col. 7, lines 45-65).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of improved quality of service over a series of related messages exchanged between computers as taught by Hill and Ben-Shaul while employing cookies in the headers as taught by Foladare in order to create a connection bridging two terminals (Foladare: col. 7, lines 45-65).

With regards to claim 52, the method according to claim 5, further comprising storing the TQoS values as one or more cookies on the client computer (Foladare: col. 6, lines 66- col. 7, lines 15).

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al in further view of U.S. Patent No 5,907,547 by Foladare et al in further view of U.S. Patent No. 6,574,218 by Cooklev.

With regards to claim 53,

The Hill, Ben-Shaul and Foladare references teach the method according to claim 52.

The Hill, Ben-Shaul, and Foladare references do not explicitly state sending the TQoS values to the server.

The Cooklev reference teaches:

transmitting the TQoS values from the client computer to the server computer with subsequent ones of the related messages comprises determining the TQoS values to be transmitted from the client computer based on the stored one or more cookies on the client computer (Cooklev: col. 7, lines 46-52).

The Cooklev reference further teaches the invention provides an efficient approach to ensure streaming data from a server to a client (Cooklev: col. 4, lines 45-54).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of improved quality of service over a series of related messages exchanged between computers as taught by Hill, Ben-Shaul, and Foladare while transmitting data back to the server as taught by Cooklev in order to efficiently ensure streaming data from a server to a client (Cooklev: col. 4, lines 45-54).

Art Unit: 2155

While the examiner understands the difference between a method, system and computer program product, the examiner equates the method to the code, hardware, and actions of which invention runs. Therefore parallel claims are drawn between similar claims with different preambles (drawn below) and are rejected based on basis as described above.

H+B	1	19	37
H+B	2	20	38
H+B	3	20	38
H+B	4	21	39
H+B+C	5	22	40
H+B+C	6	23	41
H+B	7	24	42
H+B	8	24	42
H+B	9	24	42
H+B	10	25	43
H+B	11	26	44
H+B	12	27	45
H+B	13	28	46
H+B	14	29	47
H+B	15	30	48
H+B	16	31	49
H+B	17	32	50
H+B	18	33	51
H+B	34		
H+B+F	52	54	56
H+B+F+C	53	55	57
H+B	35		
H+B+F	36		

Therefore:

1-4, 6-18, 34, 19-21, 24-33; 37-39, 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al.

Claims 22-23, 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al in further view of U.S. Patent No. 6,574,218 by Cooklev.

Claims 36, 52; 54; 56 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al in further view of U.S. Patent No 5,907,547 by Foladare et al.

Claims 53, 55, 57 are ejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 6,768,738 by Hill et al in view of U.S. Publication No. 2002/0010798 by Ben-Shaul et al in further view of U.S. Patent No 5,907,547 by Foladare et al in further view of U.S. Patent No. 6,574,218 by Cooklev.

REMARKS

Applicant's independent claim is very broad leaving it open to a broad interpretation. The examiner encourages applicant to detail the independent claim to overcome the prior art of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2155

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R. Bruckart whose telephone number is (571) 272-3982. The examiner can normally be reached on 8:00-5:30PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Benjamin R Bruckart
Examiner
Art Unit 2155

brb



BHARAT BAROT
PRIMARY EXAMINER